

TKACHEVA, T.

Regulating the wages of workers of cultural and educational  
institutions in the Czechoslovak Socialist Republic. Biul.  
nauch. inform.: trud i zar. plata 4 no.8:47-49 '61. (MIRA 14:10)  
(Czechoslovakia--Wage payment systems)

TKACHEVA, T.

Raising the workers' living standards in Czechoslovakia during  
the second and third five-year plans in Czechoslovakia. Biul.  
nauch. inform.: trud i zar. plata 4 no.10:46-50 '61. (MIRA 14:10)  
(Czechoslovakia--Cost and standard of living)

TKACHEVA, T.

Developing several types of service industries in the Czechoslovak  
Socialist Republic. Biul. nauch. inform.: trud i zar. plata 5 no.2:  
51-54 '62. (MIRA 15:2)

(Czechoslovakia--Service industries)

TKACHEVA, T.

Drawing into productive work persons of pensionable age in  
Czechoslovakia. Biul.nauch.inform.:trud i zar. plata 4  
no.4:56-58 '61. (MIRA 14:6)  
(Czechoslovakia--Age and employment)

TKACHEVA, T.

Plant scholarships in Czechoslovakia. Biul.nauch.inform.: trud i  
zar.plata no.12:67-68 '59. (MIRA 13:10)  
(Czechoslovakia--Scholarships)

DRAZNIN, N.M., red.; MEREZHINSKIY, M.F., red.; TKACHEVA, T., red.  
izd-va; VOLOKHANOVICH, I., tekhn. red.

[Fundamentals of endocrinology] Osnovy endokrinologii. Minsk,  
Izd-vo Akad. nauk BSSR, 1963. 419 p. (MIRA 16:7)  
(ENDOCRINOLOGY)

BALEK, A. [Bálek, Alexej]; DANEK, S. [Daněk, Stanislav], inzh.; POFF, A. [Poff, Arthur], inzh.; KOLVODA, Ya. [Kalvoda, Jan], doktor; SHMID, Y. [Schmid, Josef], inzh.; SHKVR, I. [Švor, J.], doktor; VAYTTS, A. [Waitz, Antonín], inzh.; ROMASHKIN, N.I. [translator]; VEKSHIN, G.K. [translator]; TKACHEVA, T.K. [translator]; OSTROUMOVA, V.S., red.; SEMENOVA, N.Kh., red.; KAPRALOVA, A.A., tekhn.red.

[General inventory of fixed assets in Czechoslovakia] General'naya inventarizatsiya osnovnykh fondov v Chexoslovakii. Moskva, Gosstatist.izd-vo, 1959. 101 p. (MIRA 13:2)  
(Czechoslovakia--Inventories)

TKACHENKO, T. V.

Changes in the white blood picture following the "milk probe"  
in irradiated animals. Vop. radiobiol. 2:158-163 '57.

(MIRA 12:6)

1. Sotrudnik Tsentral'nogo nauchno-issledovatel'skogo rentgeno-  
radiologicheskogo instituta Ministerstva zdravookhraneniya SSSR.  
(LEUCOCYTES) (RADIATION SICKNESS) (MILK--PHYSIOLOGICAL EFFECT)



TKACHEVA, T.V.

Data for the analysis of changes in the leukocyte count as a reaction to the stimulation of gastric mechanoreceptors following animal irradiation. Med.rad. 5 no.2:12-18 F '60.

(MIRA 13:12)

(RADIATION—PHYSIOLOGICAL EFFECTS) (STOMACH) (LEUKOCYTES)

TKACHEVA, T.V., kand.med.nauk (Leningrad)

Doses of X-ray irradiation received by the patients during  
the catheterization of cardiac cavities and large blood  
vessels. Vest.rent.i rad. 40 no.5:49-53 S-0 '65.

(MIRA 18:12)

TKACHEVA, T. V.: Master Med Sci (diss) -- "Material on the study of the reactions of the blood system to stimulation of the interoceptors after irradiation". Leningrad, 1958. 14 pp (Central Sci Res Inst of Med Radiology of the Min Health USSR), 150 copies (K1, No 8, 1959, 139)

TKACHEVA, T.V.

Long-term observations of the composition of the peripheral blood and the bone marrow in animals following a single total-body irradiation. Med. rad. 4 no.3:14-21 Mr '59. (MIRA 12:7)

1. Iz fiziologicheskoy laboratorii (zav. - kand. med. nauk V. F. Cherkasov) Tsentral'nogo nauchno-issledovatel'skogo rentgeno-radiologicheskogo instituta.

(ROENTGEN RAYS, effects,

total-body single irradiation on blood count in peripheral blood & bone marrow (Rus))

(BLOOD CELLS,

count, eff. of total-body single x-irradiation (Rus))

(BONE MARROW, eff. of radiations,

x-ray total-body single irradiation (Rus))

TKACHEVA, Z.I.; NAZARUK, Z.K., inzh.; SOKOLOVA, L.A.

Processing expeller flaxseed cake brought to the Vitebsk Oil  
Mill. Masl.-zhir. prom. 27 no.11:39-40 N '61. (MIRA 15:1)

1. Vitebskiy masloekstraktsionnyy zavod.  
(Vitebsk--Oil industries--Equipment and supplies)

TKACHEVA, Z.M.

Organization of work as the main factor: Zashch. rast. ot vred.  
i bol. 8 no.9:3-4 8 '63. (MIRA 16:10)

1. Glavnyy agronom Upravleniya zashchity rasteniy Ministerstva  
proizvodstva i zagotovok sel'skokhozyaystvennykh produktov  
U=SSR.

AVDEYEVA, T.I.; TKACHEVA, Z.S.

Chemism of the leaching process of sulfate-limestone sinters. Trudy  
Khim.-met.inst.Sib.otd.AN SSSR no.15:55-59 '60. (MIRA 14:6)  
(Chemistry, Metallurgic) (Leaching)

LILEYEV, I.S.; ROZENTRETER, R.G.; AVDEYEVA, T.I.; TKACHEVA, Z.S.; MOROZOV, G.S.

Pilot-plant testing of the sulfate-limestone method of preparing  
alumina from Salair bauxites. Trudy Khim.-met.inst.Sib.otd.AN SSSR.  
no.15:81-89 '60. (MIRA 14:6)  
(Salair Ridge--Bauxite) (Alumina)



ROZENTRETER, R.G.; TKACHEVA, Z.S.; BERSENEVA, N.S.

Studying the process of sintering bauxite-sulfate charges in a  
rotary furnace reduction-oxidation medium. Trudy Khim.-met.inst.  
Sib.otsl.AN SSSR no.15:131-144 '60. (MIRA 14:6)  
(Bauxite) (Sintering)

ROZENTRETER, R.G.; TKACHEVA, Z.Š.; GORYUNOVA, A.A.; LILEYEV, I.S.

Sintering of soda-sulfate-limestone charges. Trudy Khim.-met.inst.  
Sib.otd.AN SSSR no.1541-54 '60. (MIRA 14:6)  
(Aluminum--Metallurgy) (Sintering)

ROZENTRETER, R.G.; TKACHEVA, Z.S.; PAVLYCHEVA, A.I.; LILEYEV, I.S.

Sintering of sulfate-limestone charges. Trudy Khim.-met.inst.Sib.  
otd.AN SSSR no.15:27-39 '60. (MIRA 14:6)  
(Aluminum—Metallurgy) (Sintering)

TKACHEVOY, T.V.

Changes in the reaction of white blood to the stimulation of  
gastric mechanoreceptors in irradiated animals. Vop.radiobiol.  
2:164-177 '57. (MIRA 12:6)

1. Sotrudnik TSentral'nogo nauchno-issledovatel'skogo rent'geno-  
radiologicheskogo instituta Ministerstva zdravookhraneniya SSSR.  
(RADIATION SICKNESS) (LEUCOCYTES) (STOMACH--INNERVATION)

ANTOSHIN, Ye V.

-25(5)

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PHASE I BOOK EXPLANATION

809/1361

Sovetskii mekhanika mekhanizirovannogo zavoda i dnuh tozash.  
t. 2: Tekhnologiya remonta (Remont for Mechanics of Machine-building  
Plants in Two Volumes. Vol. 2: Technology of Repair Operations) Moscow,  
Mashgiz, 1958, vol. 1099 p. 30,000 copies printed.

Red. M. I. Ra. S. Kurdyov, Engineer; Ed.: K. O. Topin, Engineer; Tech. Ed.:  
S. P. Sokolov, Ed. of Sci.: Yu. S. Kriyov, Engineer, A. P. Vladimirov,  
Senior of Technical Sciences, and R. A. Kostin, Candidate of Technical Sciences,  
Managing Ed. for Reference Literature (Mashgiz); V. I. Krylov, Engineer.

PURPOSE: This handbook is intended for personnel responsible for repair and main-  
tenance operations in a machinery-manufacturing plant.

CONTENTS: The handbook contains information pertinent to the organization of  
repair and maintenance operations, design-preparation of maintenance work, and  
records of maintenance. Information on scientific research organizations and  
persons participating in preparation of this volume is included in the coverage  
of Volume 1 (809/1359). There are no references. Basic topics in the coverage  
include: planning and making of parts in maintenance operations; metal-working  
boasting, and pipe-fitting; finishing operations involved in maintenance work;  
checking parts for precision; basic methods and assembly work; maintenance work;  
power equipment; and maintenance of foundations.

Methods of increasing the kinematic precision of screw- and  
gear-cutting machines (Arkhangel'skiy, L. A., Engineer;  
Zhelezniy, L. A., Engineer, and Kivshite, G. A., Candidate of  
Technical Sciences)

Direct increase of precision of kinematic chain links  
Error composition in kinematic chains  
Improving precision characteristics of machine tools by  
changing their kinematic parameters  
Stabilization of errors in kinematic chains

Technology of manufacturing parts for metal-cutting machines  
(Vodiyev, L. A., Engineer)  
Manufacturing of shafts and spindles  
Manufacture of lead screws  
Manufacture of gears  
Manufacturing of worm gears and worms  
Manufacturing of rollers and flywheels  
Manufacture of springs

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ANTOSHIN, Ye.V.

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PHASE I BOOK REPRODUCTION

807/1951

Spevuchskiy mashinostroyitel'nyy zavod v drevnykh Odeskakh.  
S.P. Tekhnologiya remonta (Handbook for Mechanics of Machine-building  
Plants in Two Volumes). Ed. by Ye.V. Antoshin. Moscow, Mashinostroyeniye, 1958. Vol. 1, 1958 p. 40,000 copies printed.

Red. Ye.V. Antoshin, Engineer; Ed.: Ye.V. Antoshin, Engineer; Tech. Ed.:  
S.P. Tekhnologiya remonta (Handbook for Mechanics of Machine-building  
Plants in Two Volumes). Ed. by Ye.V. Antoshin. Moscow, Mashinostroyeniye,  
1958. Vol. 1, 1958 p. 40,000 copies printed.

PURPOSE: This handbook is intended for personnel responsible for repair and main-  
tenance operations in a machinery-manufacturing plant.

CONTENTS: The handbook contains information pertinent to the organization of  
repair and maintenance operations, design-preparation of maintenance work, and  
economics of maintenance. Information on the organization of maintenance work  
plants participating in preparation of this volume is included in the volume  
of Volume 1 (807/1959). There are no references. Basic topics covered include  
reconditioning and making of parts in maintenance operations; metal-working,  
hoisting, and pipe-fitting; finishing operations involved in maintenance work;  
checking parts for precision; basic bench and assembly work; maintenance of  
power equipment; and maintenance of foundations.

Checking the kinematic precision of machine tools (Archangel'skiy, L.A.,  
Engineer; Tschernykh, G.I., Engineer and Krasovskiy, G.A., Engineer)  
624  
Geometric and kinematic inaccuracies of machine tools  
624  
Kinematic chains of gear-cutting and threading machines and  
631  
methods for their inspection  
631  
Checking the precision of kinematic chains connecting two  
633  
rotating shafts  
633  
Indirect control of kinematic precision  
634  
Direct control of precision of kinematic chains  
634  
Controlling precision of kinematic chains connecting rotating and  
641  
translating links  
641  
Gear-cutting machines  
641  
Determining basic component factors of functional error  
643  
Including the effect of inaccuracy of measuring instruments in  
644  
determining functional kinematic errors  
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Part 18/26

TKACHEVSKIY, G. I.

Povysheniye kinematicheskoy tochnosti zubofrezernykh stanov (Increasing the kinematic accuracy of gear cutting machines, by) L. A. Arkhangel'skiy, G. I. Tkachevskiy i G. A. Livshits. Moskva, Mashgiz, 1954. 199 p. diagrs.

SO: N/5  
741.415  
.A7

TKACHEVSKIY, G.I., LIVSHITS, G.A. and ARKHANGELSKY, L. A.

"Increased kinematic precision of Gear-Cutting machines", published th the Scientific and Technical State Publishing House for Literature on Machine Manufacturing and Shipbuilding in Moscow in 1954.

SO: TABCON, sum. of context, D-69548, 3 Aug 1954.



*10-11-1957 V.*  
VIKTOR, Z., prof.; TKACHEVSKIY, V. (Vrotslav)

State of the gastric mucosa during sleep therapy. Klin.med. 35  
no.11:136-137 N '57. (MIRA 11:2)

1. Iz tret'yey kliniki vnutrennikh bolezney (zav. - prof.  
Ye.Shcheklik) Meditsinskoy akademii (Vrotslav)

(PEPTIC ULCER, ther.

sleep, pathol. of gastric mucosa, gastroscopy)

(SLEEP, ther. use

peptic ulcer, pathol. of gastric mucosa, gastroscopy)

(GASTROSCOPY, in various dis.

peptic ulcer, eff. of sleep ther.)

TKACHEVSKIY, G.I., inzh.; BOROVICH, L.S., kand.tekhn.nauk

"Essential information about gear transmissions" by M.L.Mitsengendler.  
Reviewed by G.I.Tkachevskii, L.S.Borovich. Mashinostroitel' no.10:46-47  
O '57. (MIRA 10:11)

(Gearing) (Mitsengendler, M.L.)

TKACHEVSKIY, G.I.

ABRAMOVICH, I.I., prof., ANBINDER, A.G., inzh., ANTOSHIN, Ye.V., inzh.,  
 ARKHANGEL'SKIY, L.A., inzh., ASTAF'YEV, S.S., kand. tekhn. nauk,  
 AFANAS'YEV, L.A., inzh., BARGSHTEYN, I.I., inzh., BORISOV, Yu. S.,  
 inzh., red., BYALYY, I.L., inzh., VETVITSKIY, A.M., inzh., GERSHMAN,  
 D.Kh., inzh., GINZBURG, Z.M., inzh., GOROSHKIN, A.K., inzh.,  
 "EVDOKIMCHIK, Kh.I., inzh., ZHIKH, V.A., kand. tekhn. nauk,  
 ZABYVAYEV, Ye. I., kand. tekhn. nauk, [deceased], ZOBIN, V.S., inzh.,  
 IVANOV, G.P., kand. tekhn. nauk, KAPRANOV, P.N., inzh., KONDRATOVICH,  
 V.M., inzh., KOSTEREV, S.K., inzh., KOVAL'SKIY, N.N., inzh., KRUGLYAK,  
 L.A., inzh., LUKYANOV, T.P., inzh., LAPIDUS, A.S., kand. tekhn. nauk,  
 LIVSHITS, G.A., kand. tekhn. nauk, LISHANSKIY, I.M., inzh., MIGALINA,  
 Ye.Ya., inzh., NOSKIN, R.A., kand. tekhn. nauk; PRONIKOV, A.S.,  
 doktor tekhn. nauk, REGIRER, Z.I., kand. tekhn. nauk, HUDYK, M.A.,  
 inzh., SOKOLOVA, N.V., inzh., SAKLINSKIY, V.V., inzh., SAKHAROV, V.P.,  
 inzh., TOKAR', M.Kh., inzh., TKACHEVSKIY, G.I., inzh., KHRUNICHEV,  
 Yu.A., kand. tekhn. nauk, TSOPIN, K.G., inzh., red.; SHEYNGOL'D, Ye. M.,  
 inzh., SOKOLOVA, T.F., tekhn. red.

[Handbook for machinists of machinery plants in two volumes] Spravochnik  
 mekhanika mashinostroitel'nogo zavoda v dvukh tomakh. Moskva, Gos.  
 nauchno-tekhn. izd-vo mashinostroit. lit-ry. Vol. 2. [The technology  
 of repair work] Tekhnologiya remonta. Otv. red. toma IU. S. Borisov,  
 1958. 1059 p. (MIRA 11:10)

(Machinery--Maintenance and repair)  
 (Machine-shop practice)

TKACHEVSKIY G.I.

ARKHANGEL'SKIY, L.A.; TKACHEVSKIY, G.I.; LIVSHITS, G.A.

Increasing the kinematic accuracy of gear-milling machines. [Trudy]  
TSNIITMASH 65:3-199 '54. (MLRA 7:9)  
(Gear-cutting machines)

KOGEL', I.S., inzh.; TKACHEVSKIY, V.I., kand.tekhn.nauk; ANDREYEV, V.M.,  
prof., otv.red.; VERZHBINSKAYA, I.I., inzh., red.; KRASLAVSKIY,  
G.M., tekhn.red.

[Disk cutters with a mechanical fastening of hard-alloy tips]  
Diskovye frezy s mekhanicheskim krepleniem plastinok tverdogo  
splava. Leningrad, 1952. 6 p. (Informatsionno-tekhnicheskii  
listok, no.18 (359)) (MIRA 14:6)

1. Leningradskiy Dom nauchno-tekhnicheskoy propagandy.  
(Metal-cutting tools)

TKACHEVSKIY, Yuriy Matveyevich; PAL'CHUN, I.F., red.; YERMAKOV,  
M.S., tekhn. red.

[Work units in corrective labor colonies] Otriadnaia sistema  
v ispravitel'no-trudovykh koloniyakh; lektsiia dlia studentov  
iuridicheskogo fakul'teta. Moskva, Izd-vo Mosk. univ., 1962.  
29 p. (MIRA 16:3)

(Convict labor)

TRUCHENILY, I. M.

741  
1919

Alkoholizm i prestupnost' (Alcoholism and Crime, by) G. A. Lantsovskiy  
I. M. Truchevskiy. Moskva, Gosyurizdat, 1956.

98 p.

Bibliographical footnotes.

CR

TKACHIK, A., inzh. (g.Groznyy, Checheno-Ingushskaya ASSR)

"Gas equipment, apparatus, instruments, and fittings"; a catalog.  
Reviewed by A. Tkachik. Zhil.-kom. khoz. 10 no.11:33 '60.

(MIRA 13:11)

(Gas manufacture and works--Equipment and supplies)



TKACHIK, A., inzhener.

Problems of gas supply to the cities. Zhil.-kom. khoz. 3 no.3:10-11 Mr '53  
(MLRA 6:5)

1. Groznenskiy oblastnoi projekt.

(Gas distribution)

TKACHIK, A.

First steps. Voen. znan. 40 no.9:40 S '64. (MIRA 17/11)

1. Nachal'nik Kaliningradskogo morskogo kluba Vsesoyuznogo dobrovol'nogo obshchestva sodeystviya armii, aviatsii i flotu.

TKACHIK, V.

Give better help to those competing. Sov. profsoiuzy 17  
no.6:18 Mr '61. (MIRA 14:3)  
(Kirghizistan—~~Socialist~~ competition)

FRACHILIN, S.V.

Drilling wells under in the southeastern sector of the L'viv, or-  
Donets Lowland. Reft. i gaz. prom. no.4:68-69 6-2 43.

(S'PA 17:2)

1. Test "Khar'kovneftegazrazvedka".

ROSHCHIN, A.P.; KLITICHKO, I.Y.; LARKE, I.Yu.; ELIY, A.R.; SOKOLOV, P.P.;  
KHORZHEVSKIY, S.A.; KHACHISHVILI, S.V.

New gas-bearing area in the southeastern section of the Indus-  
Donets Lowland. Gaz. prom. 8 no.12:2-6 '63 (NIE 12:1)

ca

Petrology of granites of the crystalline zone. Profile of the Mokroi Moskovskoi batholith. (O. D. Khachoy, *J. Geol., Acad. Sci. Ukrain. S. S. R.* 4, 11: 43 (1937). On the basis of analyses of the compns. of the granites, and microscopic examn., T. discusses the origin and nature of this formation. F. H. Rathmann

TKACH'OV, R.A.; ALEKSANDROVA, L.I.; PROKHOROVA, E.S.

Hypertensive cerebral crisis. Suvrem med., Sofia no.7-8:11-20 '60.

1. Iz Instituta po nevrologiia na AMN SSSR (Direktor prof. N.V.  
Konovalov)

(HYPERTENSION compl)

(CEREBRAL HEMORRHAGE etiol)

VINOGRADOV, K.O.; TKACHOVA, K.S.

Fertility of the Black-Sea fish. Dop.AN URSS no.2:18-22 '48.  
(MLRA 9:9)

1.Predstavleno diysnim chlenom AN URSS D.K.Tret'yakovim.  
(Black Sea--Fishes)



TKACHOVA, K.S.

New discovery of *Atherina bonapartei* Boulanger (Pisces) in the Black  
Sea. Dop. AN URSR no. 2:14-17 '48. (MLRA 9:9)

1. Predstavleno diysnim chlenom AN URSR D.K. Tret'yakovim.  
(Black Sea--Atherine)

PASHKOVSKIY, M.V.; TSAL', N.A.; TKACHUK, A.D.

Effect of oxygen-containing anion impurities on the  
electroconductivity of alkali halide crystals. Fiz.tver.tela  
5 no.4:1167-1169 Ap '63. (MIRA 16:4)

1. L'vovskiy gosudarstvennyy universitet imeni Iv.Franko.  
(Alkali metal halides--Electric properties)

S/181/63/005/004/032/047  
B102/B186

AUTHORS: Pashkovskiy, M. V., Tsai', N. A., and Tkachuk, A. D.  
TITLE: Effect of oxygen-containing anion impurities on the electric conductivity of alkali-halogenide crystals  
PERIODICAL: Fizika tverdogo tela, v. 5, no. 4, 1963, 1167 - 1169

TEXT: The effect of KOH impurities on the electrical conductivity of KCl and KBr crystals, and of  $\text{Na}_2\text{SO}_4$  and  $\text{Na}_2\text{CO}_3$  on that of NaCl, were determined by measuring the resistance with a d-c ohmmeter in vacuo between 250 - 600°C. The impurity concentrations amounted to 0.05, 0.60 and 1.00 mole% (KOH) and 0.08, 0.40 and 1.00 mole% ( $\text{Na}_2\text{SO}_4$  or  $\text{Na}_2\text{CO}_3$ ) [Abstracter's note: 0.04 is a printing error.] For KCl and KBr  $\sigma$  was found to increase with increasing impurity concentration;  $\text{SO}_4^{2-}$  and  $\text{CO}_3^{2-}$  show an opposite effect. In all cases  $-\log \sigma$  was plotted against  $T^{-1}$  and the curves were straight lines in the case of not too high temperatures. For NaCl with  $\text{Na}_2\text{SO}_4$  the activation energy increases with the impurity concentration. The effects obtained are

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Effect of oxygen-containing...

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B102/B186

explained by the increased anion vacancy concentration which contributes to conduction only at temperatures near to the melting point of the crystal. There are 2 figures.

ASSOCIATION: L'vovskiy gosudarstvennyy universitet im. Iv. Franko (L'vov State University imeni Iv. Franko)

SUBMITTED: December 1, 1962

Card 2/2

SYABER, N.A.; TKACHUK, A.G.

Increase in the available power of K-100-90 turbines. Energ. i  
elektrotekh. prom. no.2:62-63 Ap-Je '63. (MIRA 16:7)

1. RU Donbassenergo.  
(Steam turbines)

GINER, R.F.; TKACHUK, A.I.; KLOCHKO, Yu.S.

Investigations of wells simultaneously exploited with respect to  
pipes and annular space. Gaz. delo no.12:14-17 '63. (MIRA 17:10)

1. Stryyskoye gazopromyslovoye upravleniye.

B-5

TKACHUK, A.M.

USSR/Crystals.

Abs Jour : Referat Zhur - Khimiya, No 6, 1957, 18329  
 Author : N.A. Tolstoy, A.K. Trofimov, A.M. Tkachuk, N.N. Tkachuk.  
 Title : Luminescence Kinetics of Platinum Cyanide Compounds.  
 Orig Pub : Izv. AN SSSR, ser. fiz., 1956, 20, No 5, 583-590

Abstract : The kinetics of the luminescence of anhydrous and hydrous salts of  $M/\text{Pt}(\text{CN})_4$ , where M may be Li, Na, K, Po, Cs, Mg, Ca, Sr, Ba, V, La, Pr, Nd, Sm, Gd, Dy, Er, Tu, Yb, was studied with an ultrataumeter. In case of all these salts, the brightness of the stationary luminescence is in proportion to the excitation intensity, the intensity rise and quenching curves are symmetrical and exponential. The relaxation time is  $10^{-6}$  to  $10^{-7}$  sec. The luminescence kinetics depends in a complicated manner on the cation nature, the amount of water of crystallization and the crystalline structure of polymorphous modifications. The luminescence kinetics and the luminescence spectrum

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"APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755920018-3

Abs Jour : Referat Zhur - Khimiya, No 6, 1957, 18329

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are sensitive criterion of the modification of the lattice state due to heating. Frozen aqueous solutions of these salts shine with  $\tau$  close to  $\tau$  of solid salts, but the temperature course is different. The luminescence color of such solutions depends greatly on the concentration in the region of very weak concentrations ( $10^{-4}$  to  $10^{-8}$  M).

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AUTHORS: Tolstoy, N. A., Tkachuk, A. M. and Tkachuk, N. N. 51-6-11/26

TITLE: Flash Emission of Luminescence. (Vspyshechnoye razgoraniye lyuminestsentsii.) 1. ZnS-Ni Phosphors. Part I. (1. Fosfory ZnS-Ni. Chast' I.)

PERIODICAL: Optika i Spektroskopiya, 1957, Vol.II, Nr.6, pp. 759-769. (USSR)

ABSTRACT: The red band of the ZnS-Ni phosphor exhibits flash emission. The phosphor was excited with 365 m $\mu$  line of mercury. The flash was observed using a light filter. The intensity of the flash increased with the duration of the dark interval between two consecutive excitations,  $t_0$ . The maximum intensity was reached at a value of  $t_0$  which increases with decrease of temperature (see Fig.1). Preliminary illumination of the excited phosphor with infrared and green-orange light affected the flash emission. The infrared illumination shortened the dark interval before the flash but did not affect the maximum flash

Card 1/3



51-6-11/26

. Flash Emission of Luminescence. 1. ZnS-Ni Phosphors. Part I.

intensity. Illumination with 578 or 546 mμ lines of mercury decreased the ability of the phosphor to emit in a flash. If this green-orange illumination was of sufficient power and duration the flash emission disappeared altogether. The ZnS-Ni phosphor which can emit in a flash was found to possess a wide band of complementary absorption (Fig.5). It was also found that kinetics of the blue-band emission (Zn) is closely related to kinetics of the red band (Ni). The authors suggest that flash emission is due to transitions of electrons or holes from one localised state ("first localisation") to another such state ("second localisation"). Students of the Leningrad University A. Yeremeyeva and O. Popova, took part in this work. There are 6 figures and 10 references, 9 of which are Slavic.

Card 2/3

Flash Emission of Luminescence. 1. ZnS-Ni Phosphors. Part I. 51-6-11/26

ASSOCIATION: State Optical Institute imeni S.I. Vavilov; Leningrad  
Technological Institute imeni Lensovet, Chair of Physics.  
(Gosudarstvennyy opticheskiy institut im. S.I. Vavilova;  
Leningradskiy tekhnologicheskii institut im. Lensoveta,  
Kafedra fiziki).

SUBMITTED: November 28, 1956.

AVAILABLE: Library of Congress.

Card 3/3

TRACHUK, A.M.; TOLSTOY, N.A.

Luminescence of ethanolamine compounds of platinum. Opt. i spektr.  
9 no.2:261-264 Ag '60. (MIRA 13:8)

(Luminescence)

(Platinum compounds)

RYSKIN, A.I.; TKACHUK, A.M.; TOLSTOY, N.A.

Optical properties of cyanoplatinate compounds. Part 2. Opt. i  
spektr. 17 no.5:724-727 N '64.

(MIRA 17:12)

RYSKIN, A.I.; TKACHUK, A.M.; TOLSTOY, N.A.

Optical properties of cyanoplatinate compounds. Opt. i spektr.  
17 no.4:565-570 O '64. (MIRA 17:12)

TOLSTOY, N.A.; TKACHUK, A.M.; AGYEVA, L.Ye.

Some manifestations of a nonmonomolecular excitation mechanism  
in cyanoplatينات. Opt. i spektr. 14 no.1:163-165 Ja '63.

(MIRA 16:5)

(Cyanoplatinate)

(Quantum electronics)

7 K H C H U K, N. N.

TOLSTOY, N.A.; TEACHUK, A.M.; TEACHUK, N.N.; MANSUROVA, Z.S.

Flash burning of zinc-sulfide phosphors. Izv. AN SSSR. Ser. fiz.  
21 no.4:495-498 Ap '57. (MLRA 10:3)

(Luminescence) (Phosphors)

*1. A. Tolstoy, N.A.*  
TOLSTOY, N.A.; ~~TEACHUK, A.M.~~; TEACHUK, N.N.

Ultra-taometer. Izv. AN SSSR. Ser. fiz. 21 no.4:595-611 Ap '57.  
(Luminescence) (Phosphors) (MLRA 10:9)



Tkachuk, A.M.

48-4-5/48

SUBJECT: USSR/Luminescence

AUTHORS: Tolstoy N.A., Tkachuk A.M., Tkachuk N.N. and Mansurova Z.S.

TITLE: Flash Brightness Rise of Zinc-Sulfide Phosphors (Vspyshechnoye razgoraniye tzink-sul'fidnykh fosforov)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Seriya Fizicheskaya, 1957, Vol 21, #4, pp 495-498 (USSR)

ABSTRACT: A rise in the flash brightness of the luminescence long-wave band is observed in ZnS-Mn; ZnS-Ni; ZnS-Co and also in the "pure" ZnS (apparently due to iron admixtures). The flash may be 6.5 times as bright as stationary phosphorescence of ZnS-Ni. The intensity of flash depends on the duration of interruption of  $t_0$  in excitation illumination. There is an optimum time of  $t_{0 \max}$  ("ripening time") which corresponds to maximum flash. The value of  $t_{0 \max}$  depends on the phosphor composition and temperature. Temperature-dependence of  $t_{0 \max}$  is expressed by the following equation:

$$\frac{1}{t_{0 \max}} \approx e^{-u/kT}$$

Card 1/2

TITLE:

48-4-5/48

Flash Brightness Rise of Zinc-Sulfide Phosphors (Vspyshechnoye razgoraniye tzink-sul'fidnykh fosforov)

The process of flash "ripening" is interpreted as a thermal transfer process of electrons from the local "supply levels" to the local "flash levels". After a sufficient time, electrons leave thermally also flash levels. The law cited above can be derived on the basis of these conceptions.

The article is followed by a discussion of the topics touched in the report.  
No references are given.

INSTITUTION: Not indicated

PRESENTED BY:

SUBMITTED: No date indicated

AVAILABLE: At the Library of Congress.

Card 2/2

TKACHUK, A.M.

48-4-43/48

SUBJECT: USSR /Luminescence

AUTHORS: Tolstoy N.A., Tkachuk A.M. and Tkachuk N.N.

TITLE: Ultrataumeter (Ul'trataumetr)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Seriya Fizicheskaya, 1957,  
Vol 21, #4, pp 595-611 (USSR)

ABSTRACT: In order to measure relaxation process : whose duration is within the limits from  $10^{-5}$  to  $10^{-7}$  sec, a special apparatus, "ultrataumeter", was designed and constructed. Investigations of the kinetics of some luminophores were carried out with the aid of this apparatus.

The ultrataumeter uses photoelectronic multipliers. One of them is of the FEU-19 type (antimony-caesium photocathode), and the other one of the "AEG" firm (caesium oxide photocathode). The multipliers are supplied from a rectifier with electronic stabilization.

As the Soviet industry does not manufacture oscillographs suitable for application in an ultrataumeter, a special oscillograph was designed and constructed by the authors. This

Card 1/3

TITLE:

Ultrataumeter (Ul'trataumetr)

48-4-43/48

oscillograph is valuable also for the application of the method of electric differentiation. Its sensitivity to inertia is  $(1 \text{ to } 2) \times 10^{-8} \text{ sec}$ . Its horizontal frequency characteristic ranges from 5 o/sec to 10 megac/sec at the value of gain factor  $k = 500$  and to 3 megac/sec at  $k = 1,000$ .

A mechanical modulator of light can modulate the light of any spectral composition, within the limits of quartz lenses.

The practical resolution ability of the ultrataumeter with the mechanical light modulator amounts to  $10^{-8} \text{ sec}$ .

Two more ultrataumeters were constructed:

1. The ultrataumeter with an electro-optical modulator of light. It was designed for modulation of light within the visual portion of the spectrum. It was applied for studying kinetics of the infra-red luminescence of cuprous oxide.
2. The ultrataumeter for studying kinetics of cathodoluminescence. Relaxation times of cathodoluminescence up to  $10^{-7} \text{ sec}$  can be measured with the aid of this device.

The article contains 13 circuits and 4 figures.

The bibliography lists 25 references, all of which are Slavic (Russian).

Card 2/3

TITLE: Ultrataumeter (Ul'trataumetr)

48-4-43/48

The report was followed by a short discussion.

INSTITUTION: Not indicated

PRESENTED BY:

SUBMITTED: No date indicated

AVAILABLE: At the Library of Congress.

Card 3/3

Optika i Spektroskopiya, v. 17, no. 5, 1964, 724-727

TITLE: Optical properties of crystals of platinumocyanides of  
various compositions

SOURCE: Optika i spektroskopiya, v. 17, no. 5, 1964, 724-727

TOPIC TERMS: optical properties, optical spectrum, absorption spec-

ABSTRACT: The absorption spectra of crystals of platinumocyanides of  
various compositions are investigated. The results are compared with

Card 1/2



15085

S/051/63/014/001/027/031  
E039/E120

AUTHORS: Tolstoy, N.A., Tkachuk, A.M., and Ageyeva, L.Ye.

TITLE: Some manifestations of the non-molecular excitation mechanism of platinocyanides

PERIODICAL: Optika i spektroskopiya, v.14, no.1, 1963, 163-165

TEXT: Platinocyanides excited at liquid nitrogen temperature and subsequently heated at 0.6 deg/sec attain maximum thermoluminescence at ~120 °K. The estimated depth of level is derived from the formula:

$$U = k T_{\max}^2 / \delta$$

where  $\delta$  is the half width of the peak given in the table. Water of crystallisation is shown to have no effect on thermoluminescence. The dependence of relaxation time  $\tau$  on the intensity of excitation  $E$  is investigated. Using the mechanical ultra-taumeter method it was found that  $\tau$  does not depend on  $E$ . By using the pulsed ultra-taumeter method (i.e. with a pulsed ultraviolet lamp VC-3 (IS-3)) an excitation density of  $10^{17}$  quanta/cm<sup>2</sup> is attained. In this case in the "normal" regime of excitation  $\tau$  remains

Card 1/3



Some manifestations of the  $\tau$ .

S/051/63/014/001/027/031  
E039/E120

constant but on increasing the excitation density to maximum  $\tau$  begins to decrease with increase in  $E$ . The value of  $\tau$  differs by 25-30% for different salts. The decrease in  $\tau$  with increase in  $E$  occurs at room temperature as well as at liquid nitrogen temperature. The absence of photoconductivity and photo-e.m.f. is typical for pure monomolecular mechanisms. Photoelectric effects investigated using a Bierman condenser and a pulsed lamp ИФК-120 (IFK-120) with a  $\gamma\phi C-1$  (УФС-1) filter showed that platinocyanides give a well defined diffusion photo-e.m.f. signal. Electron and hole effects are observed. These effects clearly show the monomolecular mechanism of excitation and relaxation in platinocyanides. There is 1 table.

SUBMITTED: July 2, 1962

Card 2/3

Some manifestations of the ...

S/051/63/014/001/027/031  
E039/E120

Table

Composition of salt	T <sub>max</sub> , °C	δ, °C	U, eV
Li <sub>2</sub> [Pt(CN) <sub>4</sub> ] · 4H <sub>2</sub> O	-144	29	0.05
Li <sub>2</sub> [Pt(CN) <sub>4</sub> ] · xH <sub>2</sub> O <sup>1</sup>	-152	29	0.04
K <sub>2</sub> [Pt(CN) <sub>4</sub> ] · 3H <sub>2</sub> O	-158	38	0.03
Ba [Pt(CN) <sub>4</sub> ] · 4H <sub>2</sub> O	-146	16	0.08
Mg [Pt(CN) <sub>4</sub> ] · 4H <sub>2</sub> O	-146	30	0.045

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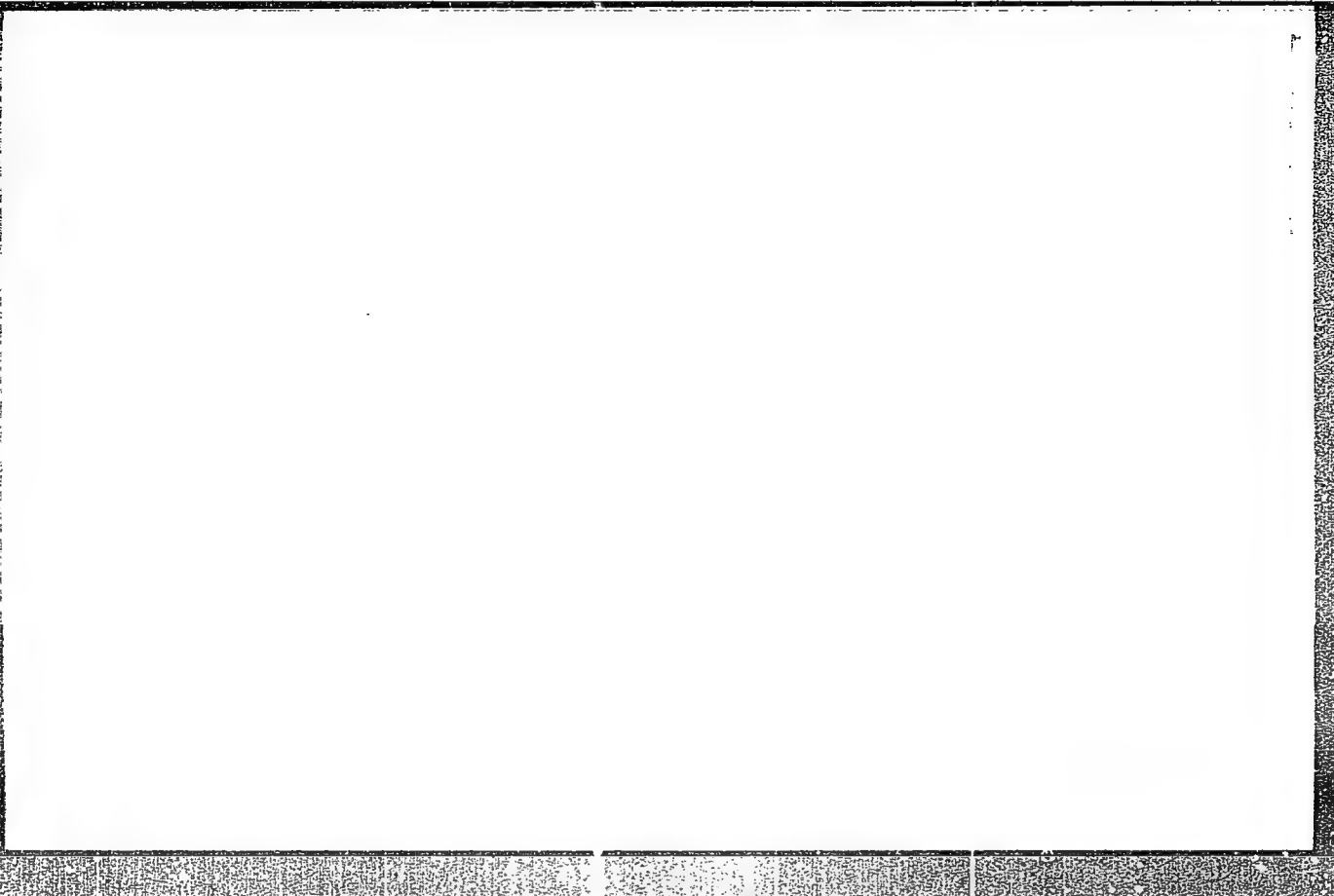
ТОЛСТОЙ, Н.А.; ТКАЧУК, А.М.; ТКАЧУК, В.М.

Flash glow of luminescence. i Zn-Ni phosphors. Part 1. Opt.i spektr.  
No.6.759-769 Jo 57. (MIRA 19:9)

1. Gosudarstvennyy opticheskiy institut imeni S.I.Vavilova, Lenin-  
gradskiy tekhnologicheskoy institut imeni Lensovetu, Kafedra fiziki.  
(Phosphors; (Luminescence)

**"APPROVED FOR RELEASE: 07/16/2001**

**CIA-RDP86-00513R001755920018-3**



**APPROVED FOR RELEASE: 07/16/2001**

**CIA-RDP86-00513R001755920018-3"**

TOLSTOY, N.A.; TROFIMOV, A.K.; TKCHUK, A.M.; TKACHUK, N.N.

Kinetics of the luminescence of platinum cyanide compounds.  
Izv.AN SSSR Ser.fiz.n.5:583-590 '56. (MLRA 9:9)  
(Luminescence) (Platinum cyanide)

*TKACHUK, A.M.*

TOLSTOY, N.A.; TKACHUK, A.M.; TKACHUK, N.N.

Temperature dependence of luminescence relaxation times of barium  
and potassium platincyanide and fluorite activated by europium.  
Zhur. eksp. i teor. fiz. 29 no.3:386-387 S '55. (MIRA 9:1)  
(Luminescence)

**"APPROVED FOR RELEASE: 07/16/2001**

**CIA-RDP86-00513R001755920018-3**

**APPROVED FOR RELEASE: 07/16/2001**

**CIA-RDP86-00513R001755920018-3"**



24(4), 24(6)

SOV/51-6-5-16/34

AUTHORS: Tolstoy, N.A. and Tkachuk, A.M.

TITLE: Studies of the Spectral Distribution of the Luminescence Decay Time of Ruby, by the Pulse taumeter Method (Issledovaniye spektral'nogo raspredeleniya vremeni zatukhaniya svecheniya rubina metodom impul'snogo taumetra)

PERIODICAL: Optika i Spektroskopiya, 1959, Vol 6, Nr 5, pp 658-664 (USSR)

ABSTRACT: Luminescence of ruby ( $Al_2O_3:Cr$ ), originally thought to be rather simple (Refs 1, 2), was recently shown to behave in a complex fashion (Refs 3-5). Further experimental work is noted on this substance. The present paper reports studies of the emission-wavelength dependence of the decay constant  $\tau$  ("the relaxation spectrum") of ruby using the pulse taumeter method (Ref 6). Fig 1 shows a taumeter with a pulse lamp IS-50 (1 in Fig 1). This instrument is capable of measuring decay constants between  $10^{-2}$  and  $2 \times 10^{-5}$  sec with an error of  $\pm 5\%$ . The exciting light (340-500 m $\mu$ ) from the lamp 1 was focused by a quartz condenser  $K_1$  on to a sample 0. Some of this light was scattered by the condenser surfaces and reached a photomultiplier FEU-1 (Fig 1). The signal from this multiplier was passed through an R-1 circuit (the taumeter proper), was amplified and applied to the X-plates of a c.r.o. EO-7

Card 1/3

Studies of the Spectral Distribution of the Luminescence Decay Time  
by the Pulse Tauometer Method

7/51-6-5-16/34  
if Ruby,

(K.O. in Fig 1). Luminescent light was focused by a second quartz condenser K<sub>2</sub> on to the entry slit of a monochromator fitted with a diffraction grating (600 lines/mm, linear dispersion 6.5 Å/mm). Luminescence which emerged through the exit slit of the monochromator was focused by a lens L<sub>1</sub> on to a second photomultiplier FEU-2 (F<sub>2</sub>) whose signal was amplified and applied to the Y-plates of the c.r.o. Measurement of  $\tau$  took less than 1 min (for details see Tolstoy, Ref 6). Six samples of ruby were studied in which the amount of chromium varied from 0.05 to 2.69%. Two series of measurements were made. In the first series the luminescence spectrum of ruby was recorded by means of a pulse lamp and an oscillograph and then the value of  $\tau$  was found for each line or band of sufficient intensity. These measurements were carried out at -193 and +20°C. The results obtained ( $\tau$  varied from 0.3 to 5.6 sec) are given in a table on p 661 and in Fig 2. The latter figure shows the luminescence and "relaxation" spectra at -193 and +20°C for three samples with 0.05, 0.95 and 2.69% of chromium. In the second series of experiments the temperature dependences of  $\tau$  were measured in the region from 80 to 500°K for the strongest lines or bands.

Card 2/3

Simultaneously, the temperature dependences of the emission brightness

Studies of the Spectral Distribution of the Luminescence Decay  
by the Pulse Taumeter Method

SOV/51-6-5-16/34  
Time of Ruby,

of these lines or bands were obtained. It was found that (1) ruby can have 7 to 8 different decay constants at various emission wavelengths from 690 to 800 mμ and (2) concentration of chromium affects strongly not only the absolute value of  $\tau$  (which increases with increase of the amount of Cr) but also the temperature dependence of  $\tau$  in the region 80-500°K. The experiments described here illustrate the possibilities of the pulse taumeter and show that ruby has an interesting but unknown, as yet, mechanism of energy transfer between emission centres. T.V. Kreytser took part in measurements. There are 3 figures, 1 table and 9 references, 6 of which are Soviet, 2 English and 1 German.

SUBMITTED: May 26, 1958

Card 3/3

RYSKIN, A.I.; TKACHUK, A.M.; TOLSTOY, N.A.

Properties of ethanolamine compounds of divalent platinum.

Opt. i spektr. 18 no.3:422-431 Mr '65.

(MIRA 18:5)

RYSKIN, A.I.; TKACHUK, A.M.; TOLSTOY, N.A.

Optical properties of complex compounds of bivalent platinum.  
Izv. AN SSSR. Ser.fiz. 29 no.3:512-515 Mr '65.

(MIRA 18:4)

TOLSTOY, N.A.; TKACHUK, A.M.

Ultra-taumeter with a pulse tube. Opt. i spektr. 15 nc.5:698-704  
N '63. (MIRA 16:12)

TOLSTOY, N.A.; TKACHUK, A.M.; RYSKIN, A.I.

Flare luminescence. Part 3: Effect of the intensity of exciting  
and de-exciting light. Opt. i spektr. 10 no.2:220-224 F '61.

(MIRA 14:2)

(Luminescence)

20846

9.4160 (also 1137, 1395)

S/048/61/025/053/035/047  
B104/B202

AUTHORS: Tolstoy, N. A., Tkachuk, A. M., Sokolov, V. A.,  
Burlakov, A. V., Ryskin, A. I., Mansurova, Z. S., and  
Yepifanov, M. V.

TITLE: Flash-heating of ZnS-phosphors and concurrence of  
luminescence bands

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya,  
v. 25, no. 3, 1961, 399-405

TEXT: This paper was presented at the 9th conference on luminescence  
(crystal phosphors), Kiyev, June 20 to 25, 1960. Flash heating of phos-  
phors is related to an accumulation of electrons or holes which occurs in  
the interval between two excitations. Proceeding from the scheme suggested  
by Schön and Klasens the authors discuss the processes occurring in this  
connection with the aid of the scheme shown in Fig. 1. They explain the  
filling of the blue and red luminescence centers with holes in the case of  
steady excitation. They also discuss the mechanism of flash heating which  
leads to the concurrence of blue and red bands which had been described

Card 1/7



20846

S/048/61/025/003/035/147

B104/B202

Flash-heating of ZnS-phosphors...

already by V. L. Levshin. On the basis of these considerations the authors study the dependence of the steady luminescence of short-wave bands on the intensity of the exciting light at different temperatures. Fig. 1 graphically shows the results obtained for different temperatures. In Fig. 1a which holds for very low temperatures, the intensity of red luminescence is represented as a linear function of energy. Fig. 1b which approximately holds for room temperature shows that red luminescence has one constant component and one component depending linearly on E. For some tens of degrees (Fig. 1c) the intensity of the red luminescence depends already nonlinearly on E. It becomes linear again only in the range of 100°C. This characteristic dependence of luminescence on the intensity of the exciting light at different temperatures is essentially explained by the filling of the first and second localization level which depends on temperature and intensity. Fig. 3 shows experimental results. It could be demonstrated already earlier that the curves of flash heating of the blue and red bands are opposite i.e., if one hole migrates off a blue center, a loss of a "blue quantum" occurs; if, however, a hole migrates to a red center, a "red quantum" is emitted. As could be proven, this process is specific and does not always apply. The experimental results

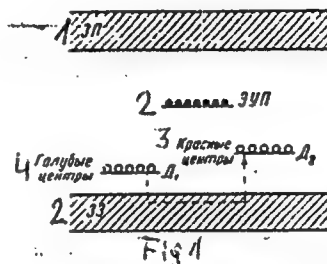
Card 2/7

Flash-heating of ZnS-phosphors...

20846  
S/048/61/025/003/035/047  
B104/B202

shown in Fig. 4 clearly show a parallelism. In the phosphors studied here red and blue luminescence occur "additively" and "concurrently". There are 5 figures and 9 references: 7 Soviet-bloc and 2 non-Soviet-bloc.

Legend to Fig. 1: 1) conduction band 2) electron adhesion level 3) red centers 4) blue centers.  $A_1$  and  $A_2$  hole levels of first and second localization.



Card 3/7

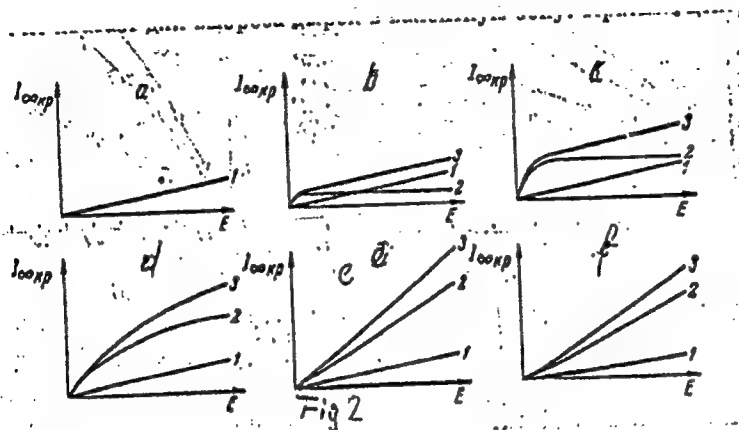
20846

S/048/61/025/003/035/047

B104/B202

Flash-heating of ZnS-phosphors...

Legend to Fig. 2: theoretical dependence of steady luminescence of the long-wave bands on the intensity of exciting light.

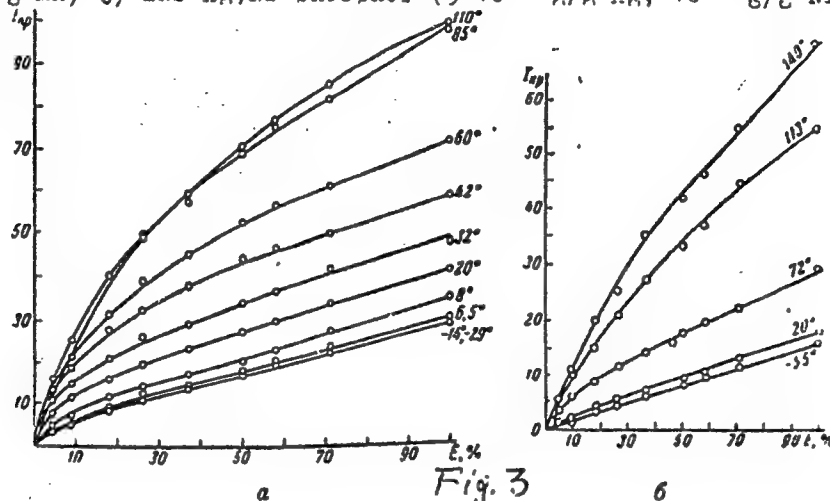


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Flash-heating of ZnS-phosphors...

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S/048/61/025/003/035/047  
B104/B202

Legend to Fig. 3: Experimental dependence of steady luminescence of the long-wave bands on the intensity of exciting light a) ZnS-Mn phosphor ( $7.5 \cdot 10^{-4}$  g/g Mn) b) ZnS-Ag,Ni phosphor ( $5 \cdot 10^{-3}$  g/g Ag,  $10^{-5}$  g/g Ni)



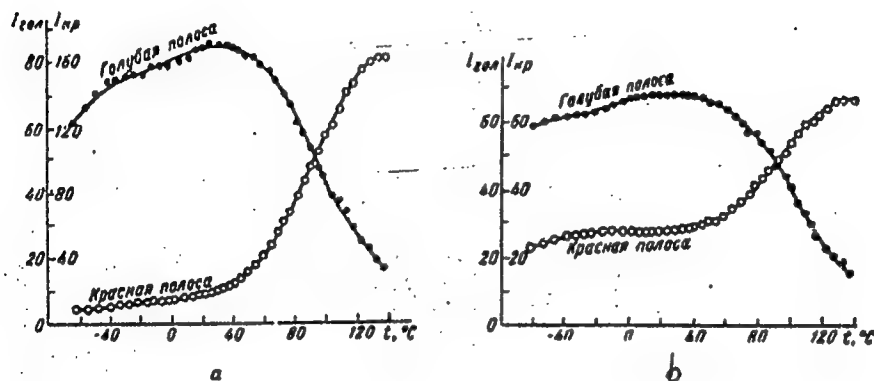
Card 5/7

Fig. 3

Flash-heating of ZnS-phosphors...

20816  
S/048/61/025/003/035/047  
B104/B202

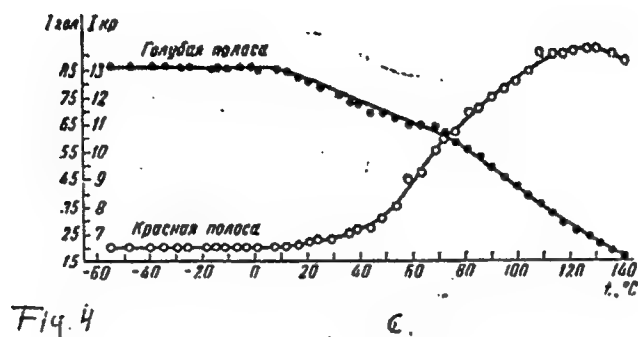
Legend to Fig. 4: temperature dependence of steady luminescence of the blue and red bands a) ZnS-Ni b) ZnS-Ag, Ni c) ZnS-Ag, Co, Ni black points: blue bands, circles: red bands



Card 6/7

Flash-heating of ZnS-phosphors...

S/048/61/025/003/035/047  
B104/B202



Card 7/7

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**APPROVED FOR RELEASE: 07/16/2001**

**CIA-RDP86-00513R001755920018-3"**

ACC NR: AP/000025

SOURCE CODE: UR/0051/66/021/005/0555/0563

AUTHOR: Tolstoy, N. A.; Tkachuk, A. M.

ORG: none

TITLE: Optical properties of platinocyanide compounds. V. Luminescence of solutions frozen into porous glasses

SOURCE: Optika i spektroskopiya, v. 21, no. 5, 1966, 555-563

TOPIC TAGS: platinum compound, cyanide, optic property, luminescence, emission spectrum

ABSTRACT: The purpose of the investigation was to check by means of an independent experiment some conclusions derived in an earlier part of the investigation (Opt. i spektr. v. 20, 1030, 1966) that the emission spectra of frozen-in solutions of platinocyanides depend strongly on the concentration of the dissolved substance. The idea of the experiment consists of introducing the investigated aqueous solution into porous glass having a known pore diameter. Inasmuch as exchange of ions between pores is difficult, the crystallization of the dissolved substance in each pore is determined by the amount of substance per pore, which in turn depends on the volume of the pore and the concentration of the solution. This makes it possible to prepare beforehand various dimers and monomers of the investigated substance and to establish their emission spectra. The tests were made on aqueous solutions of barium, magnesium, and ytterbium platinocyanides. Attention is called to a curious quantitative result

Card 1/2

UDC: 535.37



ACC NR: AP7000025

of the experiment, namely that the intensity of the dimer band increases with concentration, whereas the intensity of the monomer band remains approximately constant. This confirms that a dimer actually consists of two monomers. It is demonstrated that the experiments with porous glass make it possible to reproduce all the phenomena observed in freezing-in of free solutions of small concentrations, but to operate with large concentrations. The emission spectra are shown to depend in this experiment not only on the concentration of the solution but also on the dimension of the pores. The dependence of the emission spectrum on the dimensions of the pores is analyzed from the point of view of the single-center model developed in earlier parts of the investigation (Opt. i spektr. v. 17, no. 4 and no. 5, 1964). Orig. art. has: 5 figures and 2 tables.

SUB CODE: 20/      SUBM DATE: 29Mar65/      ORIG REF: 005

Card 2/2

TKACHUK, A.M.

USSR/Physics - Luminescence

FD-2984

Card 1/1 Pub. 146 - 25/28

Author : Tolstoy, N. A.; Tkachuk, A. M.; Tkachuk, N. N.

Title : Temperature dependence of relaxation time of luminescence of barium and potassium platinocyanides and fluoride activated by europium

Periodical : Zhur. eksp. i teor. fiz., 29, September 1955, 386-387

Abstract : By means of the method of the ultra-taumeter (N. A. Tolstoy, DAN SSSR, 102, 935, 1955) the present writers succeeded for the first time in investigating the kinetics governing the photoluminescence of several substances for which the time of extinction of luminescence lies in the time interval 1/10 to 10 microseconds (the absence of such data on the relaxation of photoluminescence in his time caused S. I. Vavilov to call this interval a blank in luminescence (Izv. AN SSSR, Ser. fiz., 13, 216, 1949). They find that for all three substances ( $K_2[Pt(CN)_4 \cdot 3H_2O$ ,  $CaF_2(Eu^{++})$ , barium platinocyanide) the brightness of luminescence is proportional to the intensity of excitation  $E$  and that the times of extinction and flare-up do not depend upon  $E$ ; thus all three cases are concerned with monomolecular processes representing comparatively slow fluorescence. Four references: e.g. P. P. Feofilov, DAN SSSR, 99, 731, 1954.

Submitted : May 27, 1955

TKACHUK, A.M.

Luminescence of platinocyanide compounds. Izv. AN SSSR Ser.  
fiz. 27 no.5:670-674 My '63. (MIRA 16:6)

(Cyanoplatinates—Spectra)

TKACHUK, A.S.

Using rapid-drying mold mixes in casting steel locomotive parts.  
Obm.tekh.opyt VPTI no.15:38-47 '54. (MLBA 9:8)  
(Molding)

ACCESSION NR: AP4012185

S/0191/64/000/002/0017/0019

AUTHORS: Omel'chenko, S. I.; Sorokin, V. P.; Tkachuk, B. M.;  
Beletskaya, T. V.; Zubkova, Z. A.; Piotrkovskaya, V. G.;  
Safonov, A. I.

TITLE: Unsaturated polyglycol maleinate resins modified by anthracene

SOURCE: Plasticheskiye massy\*, no. 2, 1964, 17-19

TOPIC TAGS: unsaturated polyglycol maleinate resin, anthracene,  
unsaturated polyester resin, glass-reinforced plastic, maleic an-  
hydride, contact method, filler, binder, heat resistance

ABSTRACT: Effort directed toward broadening the raw material base  
for synthesis of unsaturated polyester resins is acquiring great  
value in connection with the expansion of glass-reinforced plastic  
production. Unsaturated polyester resins were synthesized by two  
methods: (1) joint polycondensation of maleic anhydride with additive  
of anthracene and glycol (ethylene glycol or diethylene glycol).  
(2) introduction of anthracene during condensation polymerization of  
glycols and maleic anhydride. Two problems were simultaneously

Card 1/2

ACCESSION NR: AP4012185

solved: obtaining unsaturated polyester bonds with improved properties and the expansion of the raw material base for their production. Optimum conditions for the process were studied and it was established that stable resins can be obtained by synthesis in one stage (22-23 hrs.) and in a two-stage process (16-27 hrs.). Glass-reinforced plastic was prepared on the basis of resins derived by the contact method; glass cloth of brand T and ACTT (b) C, with paraffin lubricant were used as filler. Physical-mechanical testing indicates that the resins modified by additive or anthracene can be used as binders. Glass-reinforced plastic based on resin of certain brands (PNA-D-2, PNAD-E-3, PNAD-2.5) possess increased heat resistance and the best physical-mechanical properties.

ASSOCIATION: None

SUBMITTED: 00

DATE ACQ: 26Feb64

ENCL: 00

SUB CODE: CH, MA

NR REF SOV: 001

OTHER: 003

Card 2/2

ACCESSION NR: AP5014683

CTR. 0191-67.000.006 0005 0006  
573.674'427'448-134.434.2

AUTHOR: Tkachuk, B.M.; Omel'cherko, S.I.; Zuhkova, Z.A.; Plotrkovskaya, V.G.;  
Beletskaya, T.V.

TITLE: Effect of initiating systems on the copolymerization of anthracene-modified  
polyglycol maleate resin with styrene

SOURCE: Plasticheskiye massy, no. 6, 1968, 3-6

TOPIC TAGS: copolymerization; polymaleate; styrene copolymer; polyglycol resin;  
initiating systems; copolymerization; polymerization; copolymerization; polymerization

ABSTRACT: The article describes systems for copolymerization consisting of an initiator  
and a monomer. The systems are based on the copolymerization of two initiators and one  
monomer.

ACCESSION NR: AP5014683

The use of diethylaniline as an additional accelerator in the systems isopropylbenzene

ASSOCIATION: none

SUBMITTED: 00

ENCLOSURE

SUB CODE: OC

Card 2/2



BELETSKAYA, T.V. [Bilets'ka, T.V.]; ZUBKOVA, Z.A.; KOSILOVSKAYA, S.I.;  
PIOTRKOVSKAYA, V.G. [Piotrkovs'ka, V.H.]; ZHACHUK, B.M.

Unsaturated polyester resins with increased heat resistance and  
improved dielectric properties for the manufacture of glass  
plastics. Khim. prom.[Ukr.] no.1:5-8 Ja-Mar '65. (NIRA 19:4)

TKACHUK, B.T.

Organization of medical care of children in a rural district, Sov.  
zdrav. 15 no.5 supplement:15-16 0 '56. (MIRA 10:1)

(CHILD WELFARE

med. care in rural districts in Russia)

(RURAL CONDITIONS

med. care of child. in rural districts in Russia)

ACC NR: 1270000264

SOURCE CODE: UR/0073/00/032/011/1256/1257

AUTHOR: Trachuk, B. V.; Bushin, V. V.; Smetankina, N. P.

ORG: none

TITLE: Polymerization of siloxanes on a metal surface under the influence of a glow discharge

SOURCE: Ukrainskiy khimicheskiy zhurnal, v. 32, no. 11, 1966, 1256-1257

TOPIC TAGS: siloxane, glow discharge, organosilicon compound, polymerization

ABSTRACT: The paper deals with the formation of polymer films in an atmosphere of hexamethyldisiloxane, octamethyltrisiloxane, and hexadecamethylheptasiloxane on the surface of aluminum under the influence of a glow discharge. The latter was produced with a current having a frequency of 1000 cps at a voltage of 500-700 V. The thickness of the polymer film was found to increase linearly with the polymerization time. IR spectra of the initial organosilicon compounds and polymer films obtained and ultimate analysis of the polymer films show that the structure of the polymer is independent of the chain length in the initial organosilicon compounds. Orig. art. has: 2 figures and 1 table.

SUB CODE: 07/ SUBX DATE: 03Jun66/ CTH REF: 005

Card 1/1

UDC: 537.525+678.84

TKACHUK, F.F.

Problems in the dispensary treatment of rheumatic patients.  
Vrach.delo no.11:122-123 N '62. (MIRA 16:2)

1. Rayonnaya bol'nitsa, s. Komsomol'skoye, Vinnitskoy oblasti.  
(RHEUMATIC HEART DISEASE)